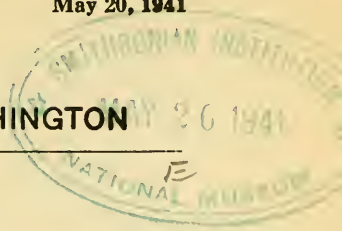


PROCEEDINGS
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A NEW SPECIES OF *XENOSAURUS* FROM
GUATEMALA.

BY L. C. STUART.

Early in 1940, while completing my investigations upon the herpetofauna of the Alta Verapaz which were sponsored by the University of Michigan in cooperation with the Carnegie Institution of Washington, I secured a specimen of the saurian genus *Xenosaurus* Peters. As might be expected of an individual taken some 500 miles beyond the known range of the genus, examination showed that it represents an undescribed species. I take pleasure in dedicating this new form to the memory of Mr. Horace H. Rackham, whose bequests made possible the endowment for research in the University of Michigan, from which has come the support for my investigations in Guatemala. The species may be known as

Xenosaurus rackhami, sp. nov.

Type.—Museum of Zoology, University of Michigan, No. 89072. An adult male collected by L. C. Stuart at Finca Volcán (49 kilometers due east of Cobán), Alta Verapaz, Guatemala, at an altitude of about 4000 feet, on March 27, 1940.

Diagnosis.—Differing from *Xenosaurus grandis* (Gray) in possessing smaller gular scales, fewer longitudinal rows of abdominal scutes, less conspicuous lateral folds, and lower and broader auricular tubercles.

Description.—Head subtriangular, the snout covered above with conical scales. Three rows of slightly-differentiated interorbital scutes, and three transversely-elongated, supraorbital scales surrounded by minute conical granules. Scales on back of head irregular and much flatter than those of the snout; pineal scute undifferentiated. On either side of the head a row of large flat scales extending from the orbit to the back of the head. Nostril in a single nasal. Supralabials 9/11, separated by a row of scales from the suboculars; infralabials, 9. Scales of temporal region large and subconical, interspersed with numerous granular scales. A row of enlarged subconical scutes along the anterior border of the tympanic depression. Gular scales small, in about 30 irregular rows from the anterior gular fold to the post-mental. Two prominent gular folds.

The body covered dorsally with enlarged, slightly-projecting ovoid scutes interspersed among many, small, granule-like scales and tending to be arranged in longitudinal series mid-dorsally. A trace of a dermal fold ventro-laterally extending from axilla to groin. The belly covered with flat, squarish scales arranged in about 32 transverse rows from axilla to groin. The limbs covered dorsally with numerous, enlarged, subconical scutes among which are interspersed small granular scales, and ventrally with convex, plate-like scales. Scales of the tail similar to those of the belly and arranged in whorls. Digits long and slender, compressed, and swollen at the articulations. The measurements are total length, 222 mm.; head length, 27 mm.; head width, 23 mm.; body length, 83 mm.; tail length, 112 mm.; fore leg, 24 mm.; fore foot, 20 mm.; hind leg, 35 mm.; hind foot, 27 mm.

The ground color dorsally, light brown. A few black mottlings on the surface of the head and a dark streak extending along the enlarged scutes between the orbit and the back of the head. Dorsally on body, five white bars bordered posteriorly and anteriorly with black, and intervening ground color mottled with black. Limbs showing irregular white and black bars or dark and light mottlings. Tail banded with black and white with traces of the brown ground color breaking up the black bands. Undersurfaces white, the belly spotted with black and brown.

Relationships.—Whether this new form will eventually be shown to be a subspecies of *grandis* awaits exploration of the highlands of Chiapas and northwestern Guatemala. Certainly the two are very close, but their differences, though slight, are distinct. Compared with a series of almost topotypic *grandis* the most prominent feature of separation lies in the size of the gular scales. In *grandis* these average about 37, as compared with 30 in *rackhami*. Though this is numerically a slight difference, a visual comparison of the two is most striking. The number of rows of abdominal scutes is less evident and a large series of *rackhami* might indicate an overlapping of this character. The range is 34–39 in *grandis*, while *rackhami* has but 32. The prominence of the lateral folds may be the result of differences in preservation. Another character of separation is the form of the enlarged tubercles not only along the anterior temporal border but over the entire body. In *grandis* these are relatively high and narrow, in *rackhami* low and broad. On the upper surface of the fore-arms the broader tubercles almost obliterate the intervening granules in *rackhami*, whereas in *grandis* the granules are far more abundant owing to the narrow bases of the tubercles. Certainly the above differences are such that subspecificity may eventually be proven.

Habits.—Nothing is known of the habits of this form. It was collected on the ground in an abandoned *cafetal* at the base of the cloud forest and under conditions identical to those occurring in the cloud forest proper a thousand feet higher. This would indicate that the form is a cloud forest inhabitant, occupying a similar habitat at a lower level rather than a lowland form at the upper level of its range. It was repeatedly observed in the Alta Verapaz that the boundary between lowland and highland types corresponded roughly with the 4000 foot contour.